

Day : Date :	Grade : 4
Number of lesson (1) Unit 1 Digit, Numeral and Number	Teacher's guide : from page 18 to 22

Lesson goals (products of learning):

At the end of this lesson the student will be able to :

- 1) Explain to students the difference between digit, numeral and number.
- 2) Discuss with students how does the place value of the number change?

Main vocabulary: Digit, numeral and number

Used supplies:

1. Sheet and pen

Issues:

(Altruism, Cooperation, Planning)

Education strategies:

1. Brainstorming
2. Quick sharing
3. Modeling

Procedures and methods of explaining this lesson:

Discover:

Student discovers the big numbers through ant facts.

Learn:

1. Ask students to write any big numeral in a square or on a sheet.
2. Ask students to compare numerals with other students.

Vocabulary form: write this number on a board

Digit: it's a single symbol used to make numerals. Digits are limited.

Number: it's an amount related to the numeral and consists of one or more digits. The numbers are unlimited and endless.

Numeral: it's a symbol or name that stands for a number. Examples: 349 and twelve are all numerals.

Think:

Think in numbers 26, 260, 62 Explain strategies that you used to choose the greatest number.

Use word digit or numeral for number to explain your ideas

(Students should learn the place value to compare values of digits in numbers and numerals)

• The following table shows examples of Digits, Numbers and Numerals:

	Digit	Number	Numeral
7	✓	✓	✓
25		✓	✓
Five			✓
3	✓	✓	✓
256		✓	✓
Seventy three			✓

So,

- The number is an idea, the numeral is how we write it.
- All digits are numbers (a 1-digit-number), not all numbers are digits.
- All digits and numbers can be called numerals.

Summarization:

Enhance means of place value, correct using expressions, moving to part of exercises, solving questions and correcting mistakes.

Day : Date :	Grade : 4
Number of lesson (2) Unit 1 Really big numbers	Teacher's guide : from page 23 to 27

Lesson goals (products of learning):

At the end of this lesson the student will be able to :

Know the place value of numbers from ones to millions.

Discuss with students how does the place value of the number change?

Main vocabulary: Digit, numeral period, millions and place value

Used supplies:

Place value table

Numbers from 0 to 9

scissors

Issues:

(Altruism, Cooperation, Planning)

Education strategies:

Brainstorming

Quick sharing

Modeling

Procedures and methods of explaining this lesson:

Discover:

Ask students to think about things that refer to millions or millions

Learn:

Ask students to read the place value of numbers in a table , start from ones to millions

Make them practice to read 5 big numbers and write it

Billions (millions)	millions			thousands			ones		
ones	hundreds	tens	ones	hundreds	tens	ones	H	T	O
3	8	1	5	5	2	0	0	2	1
3 billions	815 millions			520 thousands			21		

Think:

Students should notice that the digit 8 unequal to 8 always and its value depends on its place value

Summarization:

Sharing ideas, enhance means of place value, correct using expressions, moving to part of exercises, solving questions and correcting mistakes.

Day : Date :	Grade : 4	Time :
Number of lesson (3) Unit 1 Changing values	Teacher's guide : from page 28 to 35	

Lesson goals (products of learning):

At the end of this lesson the student will be able to :

Explain to students how does the place value of the number change? when we move the number to the left .

Main vocabulary: millions , place value , numerical period and located

Used supplies:

Place value table

scissors

Numbers from 0 to 9

Issues:

(Altruism, Cooperation, Planning)

Education strategies:

Brainstorming

Quick sharing

Modeling

Procedures and methods of explaining this lesson:

Discover:

Student discovers how to multiply any number by 10

Learn:

How does value of numbers change? when we move the number to the left .

Choose numbers card (1-9) and lift it

Notes

- 1 Ten = 10 Ones.
- 1 Hundred = 10 Tens.
- 1 Thousand = 10 Hundreds.
- 1 Ten-thousand = 10 Thousands.
- 1 Hundred-thousand = 10 Ten-thousands.
- 1 Million = 10 Hundred-thousands.
- 1 Ten-million = 10 Millions.
- 1 Hundred-millions = 10 Ten-millions.
- 1 Billions = 10 Hundred-millions.

Billions (Milliards)		Millions			Thousands			Ones		
Ones		Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones

X 10 X 10 X 10 X 10 X 10 X 10 X 10 X 10 X 10 X 10

Think:

Omar and Mona study ants and they discovered a colony of ants and in it 10 hills of ants and each hill has same number of ants

Summarization:

How to multiply numbers of ants?

Day : Date :	Grade : 4	Time :
Number of lesson (4) Unit 1 Comparing values	Teacher's guide : from page 36 to 41	

Lesson goals (products of learning):

At the end of this lesson the student will be able to :

Explain to students the relations between place value of digit and another number on the left.

Use multiplication to compare between place values.

Main vocabulary: _____

Used supplies:

Place value table

Numbers from 0 to 9

Issues:

(Altruism, Cooperation, Planning)

Education strategies:

Brainstorming

Quick sharing

Modeling

Procedures and methods of explaining this lesson:

Discover:

Guide students to discovery part (the relations are so important in the fourth lesson)

Learn:

In discovery part ask from your students to describe pattern of multiplication by 10 at every time they move one step to left

Think:

Notes	
• 10	= 1 Tens.
• 100	= 1 Hundred = 10 Tens.
• 1,000	= 1 Thousand = 10 Hundreds = 100 Tens.
• 10,000	= 10 Thousands = 100 Hundreds = 1,000 Tens.
• 100,000	= 100 Thousands = 1,000 Hundreds = 10,000 Tens.
• 1,000,000	= 1 Million = 1,000 Thousands = 10,000 Hundreds = 100,000 Tens.
• 10,000,000	= 10 Millions = 10,000 Thousands = 100,000 Hundreds = 1,000,000 Tens.
• 100,000,000	= 100 Millions = 100,000 Thousands = 1,000,000 Hundreds = 10,000,000 Tens.
• 1,000,000,000	= 1 Billion = 1,000 Millions = 1,000,000 Thousands = 10,000,000 Hundreds = 100,000,000 Tens.

Summarization:

The value of any digit increases by 10 times or it becomes 10 doubles when I move it one step to the left.

Day : Date :	Grade : 4	Time :
Number of lesson (5) Unit 1 Many ways to write	Teacher's guide : from page 42 to 47	

Lesson goals (products of learning):

At the end of this lesson the student will be able to :

Write the numeral in standard form, expanded form and word form.

Main vocabulary: standard form , expanded form , word form

Used supplies:

Numbers card from 0 to 9

Issues:

(Altruism, Cooperation, Planning)

Education strategies:

Brainstorming

Quick sharing

Modeling

Procedures and methods of explaining this lesson:

Discover:

Guide students to discovery part (same or different) in the fifth lesson and ask them to read the story

Learn:

Standard form: it is a way of using digits to write a number. Ex : 35254

Expanded form: it is a way of using place value to write a number. Ex :
 $30000 + 5000 + 200 + 50 + 4$

Word form: it is a way of using words to write a number. Ex :

Thirty-five thousands, two hundred fifty-four.

Think:

Students must use place value and show the value of each number to form the greatest numbers

Use the following Place Value table to write the number in different forms:

Billions (Milliards)			Millions			Thousands			Ones		
Ones			Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
4			9	0	2	0	7	0	0	1	5
4 Billions			902 Millions			70 Thousands			15		

- **Standard Form** : 4,902,070,015
 - **Expanded Form** : $4,000,000,000 + 900,000,000 + 2,000,000 + 70,000 + 10 + 5$
 - **Word Form** : Four billion, nine hundred two million, seventy thousand, fifteen.

Summarization:

Expanded form helps to know the value of each number in any big number and understand the place value.